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ABSTRACT

A study was conducted to identify the skills which are performed and essential for success in seven animal production and management (small animal care) occupations: animal health assistant, laboratory animal assistant, kennel worker, dog groomer, pet shop worker, stable worker, and zoo keeper. Specific objectives were (1) to develop and validate an initial task inventory, (2) to identify the specific tasks performed by workers, and (3) to determine the relative importance of the specific tasks to successful employment. An initial task inventory was constructed and validated. A sample of workers in the seven occupations was selected and data was collected from them and analyzed. The product is a list of 637 tasks, (grouped under 48 duty areas), each with a level of importance rating for each of the seven occupations. The report contains description of the methodology, data tables describing characteristics of the sample of 54 workers, the 37-page task list with importance ratings for each of the seven occupations, and a list of conclusions and recommendations for further research. (HD)

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SUMMARY OF RESEARCH

DEPARTMENT OF AGRICULTURAL EDUCATION

The Ohio State University Columbus, Ohio 43210

TASKS ESSENTIAL TO SUCCESSFUL PERFORMANCE WITHIN ANIMAL PRODUCTION AND MANAGEMENT

US DEPARTMENT OF HEALTH EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION OCCUPATIONS IN OHIO

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a Michael N. Hampson and J. Dävid McCracken

INTRODUCTION

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PURPOSE AND OBJECTIVES

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ANIMAL PRODUCTION AND MANAGEMENT OCCUPATIONS IN OHIC

- Develop and validate an initial task inventory for the animal production and management occupations.
- Identify the specific tasks performed by workers in animal production and management occupations.
- Determine the relative importance of the specific tasks to successful employment in animal production and management occupations.

DEFINITION OF TERMS

Animal Production and Management Taxonomy

Comprises the occupations which are concerned with the production and management of animals utilized for recreational, educational, and experimental purposes. Individuals involved in this taxonomy are involved in many animal related occupations except those producing animals for consumption.

Duty Area

A large segment of work performed by an individual composed of two or more related tasks. It is one of the distinct major activities involved in the work performed by the individual. Some examples of duty areas of work for the animal production and management taxonomy are:

- 1. Performing general office work
- 2. Handling and caring for animals
- 3. Feeding animals

Occupation

. The work, by job title, in which an individual is employed.

Task

A discrete unit of work performed by an individual. The unit of work generally has a definite beginning and ending, and is performed within a limited period of time. Some examples of tasks in animal production and management are:

1. Use telephone



- 2. Form temporary muzzle
- Add medication to feeds

Task Level of Importance

The relative importance of a task to the overall success on the job.

METHODOLOGY

Objectives were accomplished by constructing an initial task inventory, validating the initial inventory, selecting a sample of workers, collecting data, and analyzing data:

INITIAL TASK INVENTORY

Duty areas and task statements for occupations in animal production and management were identified by searching existing task lists, job descriptions, curriculum guides, and reference publications. Additionally, discussions with instructors of animal production and management at both the secondary vocational school and the post-secondary technical school level assisted in clarifying the specific responsibilities in these occupations. All the tasks were assembled into one, composite list.

INITIAL INVENTORY VALIDATION

The initial task inventory was reviewed by instructors of animal production and management programs in conjunction with their respective advisory committees. The advisory committees consisted of individuals trained and working in animal production and management.

After securing input from these groups, extensive revisions were made in the initial list and the format of the questionnaire. The initial inventory was revised so that incumbents could review each task to determine:

1. If the task was performed in that particular occupation.

3. Whether or not an individual performed a task, he or she was to rate the importance of the task to successful performance in the occupation.

SAMPLE SELECTION

The source of the sample for the animal health assistant occupation consisted of one hundred veterinarians which were randomly selected from a state directory of veterinarians supplied through the cooperation of the Ohio Veterinarian Medical Association. It was not possible to obtain a list of the population of personnel in the animal health assistant occupation. The sample of incumbents was those persons who worked for one of the randomly selected veterinarians.

An accessible sample of the 108 incumbent workers was identified for the remaining animal production and management occupations by teachers of vocational agriculture enrolled in a summer workshop at The Ohio State University. The 108 incumbents were distributed in the six occupations as follows: stable workers, 26; kennel workers, 16; dog groomers, 20; pet shop workers, 16; laboratory animal assistants, 12; and zoo keepers, 18. The breakdown of the animal production and management occupations is presented in Table I.

DATA COLLECTION

For the animal health assistant the survey was mailed on December 26, 1974. Instructions were provided with the survey instrument requesting that the instrument be completed by a responsible person within the occupation. On January 15, 1975 a follow-up instrument was mailed to all veterinarians who had not yet replied, and a survey return deadline was set for January 31, 1975. No surveys were accepted beyond this deadline.

For the zoo keeper occupation packets of questionnaires were mailed to seven zoos in Ohio. Instructions were provided with the survey instrument requesting that the instrument be completed by a responsible person within the zoo. A total of 18 workers were sampled.

Incumbents in the laboratory animal assistant occupation were selected from the Central Ohio area by a teacher of vocational agriculture. Individuals in the occupation were administered a questionnaire by mail.

TABLE I
Worker Response to the Survey by Occupation

	H	nimal ealth ssistant		able ker		nnel rker '	Dog Gro	g oomer		Shop ker	Ań:	poratory imal sistent	Zoc	per
	. N	%	° N .	%	N	%	И	, /o	N,	%	N 	%	- N	%
Workers in Survey	- 100	100.0	26	100.0_	16	100.0	20	100.0	16	100.0	.15	100.0	18	100.0
Respondents	54	54.0	26	100.0	16	100.0	20	100.0	16	100.0	12	100_0	18	100.0
Usable	- 41	44.0	26	100.0	12	70.6	20	100.0	16	100.0	. 11	92.0	16	89.0
Unusable	10	10.0	0 .	0,	<u>i</u> 4	29.4	0	. 0	0	0	, l/	. 8.0	2	11.0
Non Respondents	46	5 46.0	. 0	0	0	0	0	0		. 0	0	0	0.	0

Twelve laboratory animal assistants were included in the sample.

Instruments were administered to incumbents in the stable worker, dog groomer, pet shop worker, and kennel worker occupation via personal interview. A total of 78 individuals were interviewed and administered questionnaires.

All data except for the laboratory animal assistant occupation was collected prior to the summer workshop held June 17, 1975.

DATA ANALYSIS

For the animal health assistant occupation information from the usable questionnaires was coded for key punching. Each specific task statement was coded as to whether it was performed (1 = task performed by respondent; 0 = task not performed by the respondent) and the level of importance of the task (3 = essential; 2 = µseful; 1 = not important). The information was key punched on IBM cards and verified by personnel at the Instruction and Research Computer Center at The Ohio State University. Computer analysis resulted in the computation of frequencies and means for each task statement. The results of a computer analysis were printed in tabular form for ease of interpretation.

The remaining six occupations were hand calculated using the same rating system described previously. The frequencies and means for each task statement were calculated and listed in tabular form for ease of interpretation.

FINDINGS

The objectives of the study resulted in the compilation of basic sample background information and the identification of a common core of tasks considered useful and essential to all animal production and management occupations. Tasks were also identified that were considered essential and useful to specific occupations in animal production and management that were surveyed. These occupations included: animal health assistant, laboratory animal assistant, kennel worker, dog groomer, pet shop worker, stable worker, and zoo keeper.

DESCRIPTION OF THE SAMPLE

Information regarding the importance of tasks for successful employment within the animal production and management taxonomy was obtained from seven occupations within the taxonomy.

Response to the Survey

For the animal health assistant occupation 100 questionnaires were mailed and 54 replies were received. This represents a 54% rate of return. The usable rate of return was 44%, or 44 returns. The findings of this survey are based on the responses of the 54 individuals who chose to participate in the study. The response to the questionnaire by occupation is summarized in Table I.

Total Work Experience in the Occupation

Incumbent workers with varying amounts of total work experience in their occupation were included in the study. Table II summarizes the response to the question, "How many years have you worked in the occupation in total?" This information was obtained for the seven occupations in animal production and management. An examination of Table II indicates that as a group, laboratory animal assistants, had the greatest average amount of work experience in their occupation; whereas, pet shop workers as a group had the least average amount of total work experience. The incumbent workers in seven occupational areas for which information was available had an average of 6.2 years of total work experience in their occupations.

Employment at Current Job

Incumbent workers with varying amounts of work experience at their current jobs were included in the study. Table III summarizes the responses to the question, "How many years have you worked at your current job?" The information was obtained for all workers in all occupational areas except stable worker and dog groomer. An examination of Table III indicates that as a group, laboratory animal assistants had the greatest average amount of work experience in their current occupation; whereas, kennel workers as a group had the least average amount of work experience in their current occupation. The incumbent workers in the occupations who responded indicated that they had been employed in their current occupations an average of 5.2 years.

Preparation for the Occupation

Incumbent workers obtained training for their jobs from various sources. Table IV summarizes their responses to the question, "Where did you receive preparation for your occupation?" More than one response

TABLE II

Total Amount of Work Experience in Occupation

Occupation		N			Mean Years of Total Work Experience	-
Animal Health Assistant		44			7.6	
Stable Worker	6	22			5.4	
Kennel Worker	•	7	·		4.9	
Dog Groomer		20			6.4	•
Pet Shop Worker		16	•		3.7	
Laboratory Animal Assistant	•	10		v.	7.9	
Zoo Keeper		16	~		7.5	
Mean years of wooccupation =	ork expe		in the	<u> </u>	6.2	_

G

TABLE III . . . Years Employment At Current Job . .

Occupation		N		Mean Years at Current Job
Animal Health Assistant	;	44		6.5
Stable Worker	•	·NA		
Kennel Worker \	•	7	a	2.8
Dog Groomer	·	NA		•
Pet Shop Worker		: 16		3.0
Laboratory Animal Assistant		10		• 7.9
Zoo Keeper	v.	16		5.7
Mean years at pres	·	b =	1 .	5.2

/	· /	Source of Tra	ining P	и 4	Production an	d Management	,	
	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop Worker	Laboratory Animal Assistant	Zoo Keeper	Cumulative for all occupations
Source	N 76	N %	N %	N %	N %	N %	N %	N %
On-the-job	41 .93.2	26 100.0	8 66.6	13 65.0	16 100.0	11 100.0	16 100.0	131 90.3
High School Program	4 9.1	2 7.0	5 41.6	4 20.0	1 6.3	0 0	6.3	17 11.7
Technical School Program	6 13.6	1 3.7	0 0	0 0	0 0	2, 18.2	0 0	9 6.2
University Program	0 0	4 7.1	0, 0	0 0	0 0	0, 0	2 12.5	6 4.1
Adult Ed. Program	0 0	1 3.7	1 8.3	0 0	0 0	4 22.2	.1 6.3	7 4.8
Military	0 0	0 0	0 0	0 , 0	0 0	2 18.2	1 6.3	3 2.1
Other	2 4.5	3 11.5	0 0	3 15.0	3 18.8	2 18.2	2 12.5	15 10:3

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could be selected by the respondents. The most frequent source of occupational preparation was on-the-job training. The second most frequent source of preparation was a high school training program. The third most frequent source of preparation was a ignated as other sources of preparation.

Task Performed by Workers

The 637 tasks were grouped under 48 duty areas. Each respondent checked whether each task was performed in his occupation. A level of importance rating was also obtained for each task. The respondent could rate the task as essential, useful, or not important for successful performance in an occupation. A ranking of essential was assigned a numerical rating of 3, useful a numerical rating of 2, and not important a numerical rating of 1.

A level of importance rating was determined for each of the 637 tasks by calculating the mean level of importance from the incumbents who rated that task.

Tasks Essential for Successful Performance in Animal Production and Management

Those tasks receiving a rating of 2.3 or higher were considered as essential for successful performance in the specific occupations. The 2.3 level was established by a state and national curriculum advisory committee of vocational educators after examining the data. Tasks considered as essential in most animal production and management occupations were designated as common core tasks. The criterion for selecting a task for the common core of a taxonomy was as follows: the task must have been rated as 2.3 or higher in three of the seven occupations in the animal production and management taxonomy: Tasks with a rating of 2.3 or higher are summarized in Table V.

TABLE V

Animal Production and Management

	TASK STATEMEL	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper	• • •
	Performing General Office Work			·					-
;/	Admit and dismiss patients	2.8		3.0	2.9				
	Determine purpose of visits	2.6	•	. 2.8	2.9	2.7			
	File office forms and records	2.8	2.7	2.8	2.4	2.8			`.
		2.4		1					,
a	File X-rays		20	3.0	2.8	. 0		2.4	
	Greet clients and customers	2.9	2.9	3.0	·.			<u></u>	
	Notify clients of appoir ==nts	2.3	·_		2.3	1			-
/	Operate office equipment	2.7			2.3		,		
م	Schedule appointments	2.7		2.7	2.8	3			
	Use telephone	2.9	2.8	3.0	2.8	2.9	-	2.6	
	Wear appropriate dress for office work	2.8	·	2.5	-/-	3.0		2.7	· . -
	Write memos, notes, and letters	2.6	2.7	2.9	\ . / \	2.8		2.3	I
	Manage bad checks					2.4			
	Maintain personal groching			1				2.7	
	Conduct tours]		1	1/2			2.3	
-134	Work with students from sh school and colleges	es establishment - 1020	The state of the s	A: Salatina teratorization		a dana	THE RESERVE TO SEE	2.3	11484-4-4
	Answer questions about zoo animals				. ,			2.5	
		1							
	Interpreting Medical Terminology				/				
·			1	 -			2.4		1 /
	Identify circulatory system and function	.1		-	 	1.	2.3		
	Identify digestive system and function	<u>.L</u>					1_2.5	ب ب	l j



▼ TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
		`					
Interpreting Medical Terminology (cont.)							
Identify general anatomy and physiology . terms		1,			9.	3.0	
Identify integumentory system and func-						2.5	
tions					9		
Identify major disease terminology						2.4	
Identify reproductive system and a				,		2.4	
function Identify respiratory system	1						
function	1 1		·			2.6	
Identify urinary system and					4.1	2.4	
identity drinary system and			(. ر	,
					 		
Recording Information		,					· ·
Balance caily cash statement	2.3		2.3	<u> </u>	2.8		
Prepare monthly bank stater	· ·	,			2.8	,	
Deposit daily receipts	i i		2.2		2.8		,
Maintain account records an payments	2.4		2.2		2.6	ľ	
Receive payment	2.9		2.3		2.6		2.6
Record bowel movement	2.8		2.3			2.4	
Record water information						2.5	
Record feeding information	2.8		2.3		3,4	2.5	2.9
Record client information	2.8		2.7	2.7	2.3	, ,	
Record patient information	2.8		2.5	2.8	2.4	26	
Record medication information	2.5	2.8	2.7	2.3	3.0	- 2:8	2.7
Record pedigree record		2.9	2.2				<u> </u>
The second secon							



		77.1.1		 			
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Recording Information (cont.)	ζ.		\				
Record surgery information	2.4	/			2.2	2.6	2.7
Record vaccination information	2.8		2.5		2.5	2.5	2.7
Record weight information	2.2		2.4		2.5	3.0	2.7
Write checks					2.7	j.	,
Record account data				1	2.6		
Maintain personal work hours chart		·		·	2.9		
Maintain animal loss record	-		(-		2.8		
Maintain animal transfer record					2.7		
Record personal accidents		,			3.0		
Handle pilferage and inventory	0	2.5					
Record horse production information		2.3					
Record breeding and delivery dates		2.9	f			2.4	2.8
Note special events, etc.		2.7	₹,				
Observe animals in assigned areas							3.0
Record health problems requiring vet							2.6
Record heat cycle for breeding stock					('	2.4	2.7
Report needed building repairs							3.0
, r		-					
Handling and Caring for Animals							
Assist animals in delivering young	ì.		2.4	2 '			



			 -	—	·		 ;
\	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zco Keeper
Handling and Caring for Animals (cont.)							
Assist animals in numsing	.	· .	2.4			2.8	
Check if animals are pregnant			2.3	,	2.3	2.3	2.8
Collect bowel movements	2.7		2.5	5		ļ	2.4
	2.9		2.5	3.0	2.7		2.8
Control animals when handling			2.5	. ,	2.3	2.5	2.5
Estimate weight of animals		+	2.5	 			
Evaluate condition of animals		<u> </u>	 	2.4	2.8	3.0	2.9
Exercise animals	2.7	· ·	2.5		2.6	 	2.5
Identify animal heat signs	2.6		2.5	2.5	2.3	2.4	2.5 0
	2.7	,	2.5	2.6		2.7	3.0
Identify animals			2.5		2.4		2.8
Identify breeding method		 	1	+		1	1
Observe animals regularly for problems	ļ	-	2.8	+	2.9	2.9	2.8
Place animals in pens	2.7		2.8	2.5	2.7	2.8	
Induce bowel movements	2.8		2.6		1	2.4	ļ
Provide proper environment for bred			2.6		2.5	2.5	2.8
animals Regulate air movement and temperature in	+	 					2.8
holding areas	 	-	2.6	12.9		2.7	
Separate non-compatible animals	4		2.6	2.7	2.8	2.5	3.0
Take pulse and temperature	2.0		2.3		401	2.7	
				2.9			3.0
Place animal on cooming table Identify husbandr practices of			/		2.6	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
parakeet varieties				<u></u>			 u

				<u> </u>			 , '
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	D∈ Groomer	Pe Shop	Le ratory Animal A: stant	Zc Keeper
			-			;	
Handling and Caring for Animals (cont.) Identify husbandry practices of lovebirds and cockateels					2.6		
Identify husbandry practices of parrots and macaws					2.5		
Identify husbandry practices of rodents					2.5		
Tag animals					2.6	2.8	
Implement and maintain sanitory pro- cedures	;				3.0		
Isolate pregnant animals					2.4	.1	
Maintain sanitary environment for young			·		2.8		,
Play with animals			<u>.</u>		2.6	· -	
Assist in quarantine procedures						2.6	
Sex an animal	ļ	<u> </u>			ļ	2.7	
Weigh an animal	ļ				ļ	2.5	
Cool animals with hose		· 					2.7
Collect urine sample							2.4
Assist with artificial insemination			===			/	2.5
Assist cats to urinate and defecate		 			/.		2.8
\Bathe and change dispers on apes	in the second second second second	- School Selection reliable tree	\		1		2.8
De-cap smake eyes						-	2.8
Feeding Animals							
Add medication to feeds	2 ÷		2.7		2.~	2.5	2.9
						'5-	•



	Zoo keelses
To the Aminoto (cont.)	
animals	2.9
Determine nutritional requirements of 2.4 2.6 2.5	2.8
- then animals, should be	2.9
	2.9
Determine which feeds may be fed animals 2.5 2.8 2.7	2.7
	2.4
	2.5
Interpret nutritional feed charts 2.6	- 1
Place feed in containers 2.5 2.9 2.8 2.6	2.8
Prepare feed. 2.8 3.0 2.4 2.8 2.7	<u>\</u>
Provide water for animals 2.9 3.0 2.4 3.0 3.0	-
Feed pre-/post shipment diet	·.
Identify common storage procedures 3.0	3.0
Determine common nutritional principles 2.6	
Feed orphans	2.á
Receive shipments of feed, hay, etc.	2.6
	
Grooming Animals	**
Bathe animals 2.5 2.5 3.0	2.5
Clean ears 2.5 3.0	2.3



TASK STATEMENTS	Animai Healti. Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keepur
Grooming Animals (cont.)							
Clean teeth	2.4					-	2.3
Clip nails	2.5		2.4	3.0	2.3		2.4
Comb animals	2.5		2.4	3.0	2.3		
Drain anal sacs				2.4			
Dry washed animals with towels and dryer	2.3		2.4	3.0	2.3		
Identify clipping problems			at	2.7	` .		
Identify water and shampoo differences				2.7	2.5		
Perform various scissoring patterns				2.3			
Perform various clipping patterns		<u> </u>		3.0	J.	1,7 %	
Perfume animals				2.9	2.3		
Pluck hair		1		2.8	2.4	ļ	
Perform post clipping procedures				2.8			
Perform various stripping patterns		,		2.6			
Condition skin (elephant)							2.4
Clip bird claws, beaks, wings			1	,			2.7
		-		.,	The state of the s	فقرادرا مها بحاكماتان	
Performing Examining Room Work		1		-	1		
Apply bandages		· ·	2.4			- 4/2	
Assist in diagnosing infectious and non infectious diseases	1-		2.6				

								
	TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
-	Performing Examining Room Work (cont.)				•,			
	Assist in treating disease	2.3		2.6		2.5		
-	Assist the manager in determining control procedures	•		2.4		3.0		
-	Change bandages			2.8				
-	Disinfect examining table and equipment	2.8				,		
-	Identify external parasites	2.6		2.3				
-	Place and restrain animal on examining table	2.8				2.6		
\mid	Preparing examination room area	2.9				2.5		
	Use appropriate disinfectants	2.8		2.8		2.8		
-	Use proper taping techniques				, ,	2.4		
f			,					
-	Performing Laboratory Test					,		
	Analyze fecal samples	2.6			ļ			<u> </u>
	Chemically examine urine	2.3			·چ·		2.6	
	Collect urine sample	2.3			 	<u> </u>	2.6	
	Identify parasites and eggs	2.5				2.6		-
	Measure solids and liquids		,,	2.6	*y* 	2.3	2.5	THE PERSON SERVICES
••	Operate centrifuge	2.3			1.		<u> </u>	-
	Perform flotation method	2.7	1		1.			

•							,	,
TASK: STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper	-
				· · · · · · · · · · · · · · · · · · ·	•	_	*, **	
Performing Laboratory Test (cont.)								1.
Set up and adjust microscope	2.3			,				1
Convert English measure to metric						2.6		
measurement						2.0		† _
Take blood samples						2.5	ļ	↓ .
			-3					
		 			-	,		1
Dispensing Medicine and Supplies	ļ				 		·	-
Destrox empty containers and drug administration devices			2.9		2.7	2.3] .
		7				2.8		
Interpret prescription request	ļ	 	2.7	-	2	2.0	1	1)
Interpret product labels	<u> </u>		2.7		2.6	2.7		4
			2.7		2.6	2.7	: \	\
Label drug containers	2.3	 	+2;/	<u> </u>	12.0	1		1
Maintain orderly storage shelves	2.6		2:6.	<u> </u>	ļ.,,	2.7	ļ	$\frac{1}{1}$
Measure exact amounts for prescriptions	2.3	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			3	2.8		
						2.4		7
Prepare animal drug forms	 	 	ļ	 	+ +	2.4	 	1
Store products in appropriate area	2.7		2.9		2.5	2.7		_
	2.2		2.8		2.5	2.4	1	1
Transfer products to proper containers	2.2	+	12.0	 	-	 	1	7
		-	 	_		 	ļ. <u>.</u>	4
THE PARTY OF THE P	T. Lones Valario.	an er tribaten	المحالية المعاملية المحادثة	EL MISCHERMINISME	To lipping districts	er friedrikkent dertier		acon escar
Administering Medication Administer IM injections under super-	+	+	,	1		2 0		7
vision	2.3	 		+	-	2.8	+	+
Administer IV injection under super- vision	2.2					2.8		<u> </u>
Administer oral medication under super-	1.						}	
vision	2.5		2.4	1	1	2.8	1	

							 -
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker,	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
	• ;						
Administering Medication (cont.) Administer rectal medication under supervision						2.5	
Administer subcutaneous injection under	2.4					2.6	
supervision Administer surface medication under supervision	2.5		2.3			2.8	
Fill syringe	2.4			ζ.,		2.8	·
Interpret veterinarian medication prescriptic			2.2	7.		2.5	;
Identify and select animal's proper medication			:			2.5	
Locate injection points on animals under					`	2.5	
Select proper needle	1	1				2.6	ï
Sterilize injection equipment	2.6	,			1	2.7	
Decrizing injury						```	
Restraining Animals		1	/ .				1
Apply various muzzles	2.5		2.5	2.3			
Form temporary muzzles	2.5		2.5	2.3		2.3	
Identify animal moods	2.3		2.7	2.8	,	2.7	
Open mouth	2.4		2.7	2.8		2.5	ļ
Properly approach animal	2.8	POUT STANDARY	3.2	3.0	A LONG TO A STREET	2.9	2.7
Restrain animal's head	2.9		2.5	2.9		2.9	
Tie animal to table	2.4					2.7	
Catch and restrain monkeys			<			<u> </u>	2.9
Net birds					٠.		2.7



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TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper	
Restraining Animals (cont.)								
Use lasso					7		2°.4	,
Use come-a-long						. /.	2.4	.
Hand restrain large animals					\supset	· ·	2.6),
Use squeeze cage				\$	1		2.5	
Use snake hood and fork	,						2.7	- /
Operate restraining mechanisms					<u> </u>	2.7	ļ	
Tape legs		·				2.5		-
			ļ					ŀ
Assisting With X-Rays		·: ·	ļ		-		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
Adjust cassette holder	2,4	<u> </u>	ļ	ļ		 	ļ	ļ
Adjust settings	<u> </u>		2.5	<u></u>	ļ	 		Ĭ.
Identify film development problems			2.5	ļ		1	<i>p</i>	-
Clean processing tanks	4	<u> </u>	2.7	-	·			- - - ` ' -
Develop film	.2.5		2.5	ļ .	-	 	-	4
Fix film	2.4	 	3.0	 	\ ,	ļ	 `	-
Identify developing chemicals		And the fact of th	2.5	- Contraction		ere al majeriniere	and or supplicate	+
Identify normal X-ray positions	2.3	ļ		+	+	-	-	+
Maintain water and solution temperature	2.3	1.	<u> </u>	 ; -	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	-	-	-
Measure part of the animal to be examined	2.3			ļ	1	2.3		
			1,0		•		. ·	

	,					<u>.</u>	_[
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Assisting With X-rays (cont.)				,			
Mix and replace developing solution	2.3						
Position animal for X-rays	2.4					,	,
Remove film from cassette	2.4			N			
Store X-rays	2.5					,	
Use appropriate aprons and gloves	2.7						
Use proper film	2.3				_		
Using and Maintaining Small Animal Care							
Equipment Check equipment for defects	2.5		3.0	2.8		3.0	2.9
Clean and disinfect instruments and equipment	2.9		2.8	2.9	ļ	3.0	
Identify and use nail files				2.4	 	2,5	-
Identify and use rake				2.4	-	2.3	1
Identify and use thinning shears				2.9		<u> </u>	
Identify and use dental equipment	- 2.8				 	<u> </u>	
Identify and use various scissors				3.0			
Identify and use clipper head		<u> </u>		3.0	 		-
Identify and use combs				2.9			
Identify and use brushes				2.8	-	-	
Identify and use nail clippers				2.6	5	-	
Use and maintain clippers				2.7	4_		ا ب ب



TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Using and Maintaining Small Animal Care Equipment (cont.)			,				
Use vacuum sweeper	· ·			2.3		/	
Use mat splitter	ļ	,		2.3	<u> </u>		
Use hair dryer				2.8			
Interpret equipment operation instructions				2.7	-	2.6	٠.
Select appropriate equipment	2.5	<u> </u>		2.3		2.9	2.9
Sterilize instruments and equipment	2.9	,		ļ		2.9	
Store instruments and equipment	2.8	/	2.7	2.6	\ \	2.6	2.6
Repair defects		x *			6		2.3
Identify anesthesiology equipment	2.7		*		,		
Identify bandage and stitch scissors	2.4			ļ			
Identify canine tonsil snares	2.4		1				
Identify cauterizing equipment	2.6	č					
Identify fracture equipment	2.7						
' Identify post-mortem equipment	2.3	<u> </u>		ļ		<u> </u>	. ` .
Identify scissor tips	2.4					2.4	
Identify surgical blades and scalpels	2.6				<u> </u>	, ,	
Identify transfusion equipment	2.4			<u> </u>		2.3	:
Identify catheters	2.7					2.5	,
Identify various forceps	2.6					2.5	
Identify various hemostats	2.5					2.5	, ,



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TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Using and Maintaining Small Animal Care Equipment (cont.)							11
Identify various injection equipment	2,5		-			2.6	
Identify various suture needles	2.7						
Identify various syringes	2.6					2.3	2.4
Use tranquilizer gun			-				2.3
Use ball gun Backwash filters in aquariums		,					3.0
Change filter in aquarium							2.8
Receive consumables and tools from the commissary					ļ		2.7
Maintain air cleaner			-	-	ļ	2.3	
Use and maintain various scales and balances	-		-	. - 	-	2.5	
	-		-	-	<u> </u>	-	
Show Animals	•		3.0			-	-
Register	 	-	3.0	 			
Assist in show				w			
Preparing Facilities and Equipment for Surgery							-
Clean surgical equipment	2.8		-	-		2.6	
Lay out surgical equipment	2.8	1 1	-		+	-	
Perform scrubbing technique Prepare standard and special	2.7		<u> </u>	-		2.3	+
surgical packs	2.6				<u>, L</u>		



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Animal Health Assistant	Stable	Kennel Worker	Dog Groomer	71. 12. 12. 12. 12. 12. 12. 12. 12. 12. 1	Laboratory 2 mad Assistant	Goo Keeper
					1	į
2.5						
2.5	ļ				2.7	
					\	
		<u> </u>				
2.6					2.9	
2.8				,	2.5	i e
2.6			1		2.8	
2.7					2.5	
2.5						
2:9		ļ				
		`				
2.4			ļ. <u>.</u>	<u> </u>	2.6	
2.4			ļ	ļ	2.6	
2.5		2.2	2.6		2.6	2.8
2.4		2.5	2.6		2.6	2.8
2.5		2.5		-	2.7	· .
Ĭ	•	2.3		- :	2.7	2.7
2.4		2.6	1	<u> </u>	2.7	2.5
2.4		2.5		, r	2.8	2.8
	2.5 2.5 2.6 2.7 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	2.5 2.5 2.6 2.7 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	2.5 2.5 2.6 2.8 2.6 2.7 2.5 2.9 2.4 2.4 2.4 2.5 2.2 2.4 2.5 2.2 2.3 2.4 2.5	2.5 2.5 2.6 2.5 2.6 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5 2.5	2.5 2.5 2.6 2.8 2.6 2.7 2.5 2.9 2.4 2.4 2.4 2.5 2.2 2.6 2.9 2.1 2.1 2.1 2.2 2.3 2.4 2.5 2.5 2.5 2.5 2.5 2.6 2.7	2.5 2.5 2.7 2.8 2.8 2.8 2.9 2.8 2.7 2.8 2.7 2.5 2.9 2.9 2.1 2.1 2.2 2.6 2.2 2.6 2.6 2.1 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.6 2.7 2.7 2.7 2.7 2.7 2.8 2.7 2.7 2.7 2.8 2.7 2.7 2.8 2.7 2.7 2.8 2.7 2.8 2.7 2.7 2.8 2.7 2.8 2.7 2.8 2.7 2.8 2.8 2.7 2.7 2.8 2.8 2.7 2.8 2.8 2.7 2.8 2.8 2.7 2.8 2.8 2.7 2.8 2.8 2.7 2.8 2.8 2.8 2.7 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8 2.8

TASK STATEMENTS	Animal Health	~	Stable Worker	Kennel Worker	Пов Groomer	Pet Shop	Laboratory Animal Assistant	200 Keeper
Performing Emergency First-Aic								<u> </u>
Isolate abnormal animals			-	2.3	ļ 	3.0		
Maintain body temperatures				2.3	2.3		:2.6	
Prepare and transport emerge by	ns			2.3			2.5	
Prepare patient for transfu		2.5					2.4	
Stop external bleeding		2.5					2.8	
Isolate suspected rabid animals							2.7	
Isolate suspected labit					,	1. 1.1		
Inventorying Products	`							
Order supplies		2.5		2.6	2.4	2.7	2.8	2.8
Remove contaminated items		2.3		2.4		2.5	2.8	2. 7
Remove expired products		2.3		2.5			3.0	
Take physical inventory		2.3	-	2.5	2.3	2.7	2.8	2.5
Use stocking forms			1	2.3	3		2.8	2.3
Verbally report daily needs To wareho	nise		+					2.6
Verbally report daily needs			+	-	-	1	1	
			+		-	-	+	1
Selling and Marketing Products	-7		+			1 2 2	,	1-
Complete sales slip			-	2.	_	2.3		
Demonstrate items for sale				2.	5	2.9	<u></u>	+
Determine whether product reclasted :	1S	,		2.	5	2.3	3	ــــــــــــــــــــــــــــــــــــــ

							
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Asslulent	Zoo Keeper
Selling and Marketing Products (cont.)							
Handle customer inquiries and complaints			2.6	2.3	2.3		
Make change	2.4		2.9	2.3	2.3		<u> </u>
Meet customers	2,.5		2.3	2.3			
Operate cash register					2.3		
Arrange displays			2.3	<u> </u>			
Price products		}	2.4		2.3	-	
Stock shelves			2.5	-			-
Initiate sales Prepare newspaper, newsletter, and		-			2.8		
other written public advertisement	-				2.6		
. 11		 			,	-	
Following Legal Regulations		-		 	<u> </u>	ļ	!
Determine what duties may be performed Determine which materials may be sold	ļ	-	2.6	2.5	2.6	2.	2.6
without prescription	 	·	2.4	 	2.7	<u> </u>	1
Demonstrate knowledge of state laws	-	-	-	 	2.7		:
Demonstrate knowledge of local laws Demonstrate knowledge of animal health	 	+	-	 -	2.7	-	
care regulations Demonstate knowledge of laws regulating	 	-		-	2.6	1	+
pet supply companies	ل		J		2.6	1	ـــ ـــــــــــــــــــــــــــــــــ



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TASK STATEREN	Animal Health Assistant	Stable Worker	Kennel U	Dog Groomer	Pet Shop	Latte every	Soo Keeper
Following Legal Regulation: (cont.)							
Understand the legal rights and privileges of personnel					2.6		
Be aware of agencies available for legal assistance					2.6	1.	
Be aware of federal, state, and local lobby organizations					2.8		
Determine what duties are allowed by Union rules			<u> </u>				<u> </u>
Determine what restrictions are placed on keepers by zoo staff							2.8
		9 					
Maintaining Facilities		3.			<u> </u>		
Clean feeder	2.7		3.0	-	3.0	2.9	3.0
Clean holding pens, cages, and runs	2.9	J	3.0	2.6	<u> </u>	2.9	· ·
Clean waiting and grooming rooms	2.9		3.0	2.9	 	2.7	
Clean and disinfect pens	2.6	 	3.0	2.6		2.8	2.9
Dispose of residue and tras	2.9		3.0	3.0	-	2.3	
Control ventilation				2.5		-	·
Lay out grooming eq_pment	1			2.4	-	-	ļ
Clean sinks and batting areas				3.0	-	-	
Properly maintain trash and residue storage containers	+	-		 		<u> </u>	2.8
Maintain automatic watering system					-	2.6	2.9
Maintain amps, mincr repair, replace fuses		1.					2.5

TASK STATULE	Animal Hearth	Stable Worker	Kennel W.	Dog Groomer	Pet Thop	Laboratory Animal Assistant	Zoo Keeper
Main lining Familities (1111.)	<u> </u>			-		-	
Tish cage: animal ent. led)	 		-	 	 	-	2.9
Brush and scrape cases animals enclosed	<u> </u>	<u> </u>	-		1:		2.9
Shovel cages	<u> </u>			 		+	2.9
Shovel paddocks		_	-	 	-	+	2.8
Rake paddocks		ļ		-	+	-	2.8
Flush moats		<u> </u>		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			2.9
Sift and change and in bird displays				1			2.8
Wash and disinged bird cages	<u> </u>					 	2.8
Change corn com					ļ. —		2.4
Flush, mop, and squeeges floor							2.6
Wash wind ows							2.6
Drain and the area.				<u> </u>			28
Drain and 1.98 squar um areas							2.9
Change pebbles in while cage							3.0
		<u> </u>					2.3
Shovel snow							2.3
Rake leaves	-	+-		_			2.3
Clean gutters	+	+	+	_		1	2.6
Dust - sweep - wax - polish		+		-	_	_	2.8
Change light bulbs	-	+					2.5
Keep signs clear and up-to-date				l			



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TASK STATEMENTS	Animal Health Angratest	Stat	Kennel Worker	D. Gromer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper.
Following Safety Precautions	 		 	 	1		,
Administer minor first-aid for cuts,	2.3	2.8	2.7	2.5		2.5	2.8
bruises, burns, etc.	+=		+			-	
Follow mafe work nabits	2.:	2.9	3.0	3.0	2.7	2.6	3.0
TOTION CLIC NOT NAME TO	-						
Identify potential salety hazards	2.	2.3.	3.C	3-0	12.7	2.7	3.0
				ļ			Ì
Store chemicals safely	2.3	2.7	2.7	2.3		2.7	
						2.5	2.9
Use fire extinguishers	2.4	2.9	2.5	2.3	 -:3 -	2.5	12.3
	2.5	2.6	2.5	2.3	ţ	2.8	g
Wear appropriate protective clothing	12.5	2.0	12.3	+2=3-	ــــــــــــــــــــــــــــــــــــــ	1	
Consider all zoo animals will and	•	1		1	i		3.0
dangerous			+		T	 	1
Secure all animals in magent	-	1					2.3
Sectile att autiliate in referen		1	†	†			1
Learn zoo emergency procedures		1		1		<u> </u>	3.0
Learn proper technique for manually			1	1	7		
lif-ing heavy loads							2.3
Enforce all safety rules applicable to			_				
the public	į		· .				2.9
Entirce all safety rules applicable to		:	l	-	ľ		1.
animals							2.9
Teach safety to new keepers and	}		1				2.9
students		+					12.3
'Observe special precautions in							3.0
reptile area Or serve safety habits in use of knives		+	+	<u> </u>		+	+
Or serve safety habits in use of knives		1	}				2.9
grinding, etc. Observe safety with power mowers and		 	1	-	1		
c_ippers					1		2.0
C_Thher?	1	1	•	T	T	1	
Store inflammable material afet		2.7					
Ventilate work areas		2.5	-				-
Interpret information of the and						!	
signs		2.9			_L		



	<u> </u>						
TASK STATEMENTS	Assignat Heach	Stable Morker	Kennel Worker	Dog Groomer	Pet Shop.	Lehoratory Angest	Zoo Keeper
Following Safety Precautions (cont.) Use proper lifting and carrying methods		2.5					
Wear appropriate work clothes		1 2.€				 	
Adjust safety devices		2.€		i	-	<u> </u>	
Install safety devices		2.4				<u> </u>	:
Operate hand and power tools safely	· 	2.8			+		
Correct potential fire and safety hazards Determine when climatic conditions		2.8	+			-	1
provide unsafe work situations Remove debris from work area	+	<u>2.€</u> 1 2.€					
Maintain safe and clean work areas		2. =					,
Maintain and use electrical cords and connections safely	_	2.				+	
		 	-			٠	
Interpreting Grooming Terminology Identify long haired breeds requiring little trimming	+			2.5		 	
Identify the Afghan Hound				1.5			
Identify the various terriers				2.8			
Identify the poodles		-		2.8			
Identify the Pekingese				2.6	+	· 	-
Identify the setters		+	-	2.6	·		-
Identify the Golden Retriever				2.6			1



	lealth nt	Worker	Worker	Groomer	d	ory Animal nt	Keeper
TASK STATEMENTS	Animal Health Assistant	Stable	Kennel	Dog Gro	Pet Shop	Laboratory Assistant	Zoo Kee
Interpreting Grooming Terminology (cont.)			<u> </u>				
Identify the Cocker Spaniel	ļ			2.8	ļ	ļ	
Identify the various kinds of clip	ļ	ļ	ļ	3.0			
			-	 			
Ordering Tropical Fish Determine retail amounts of		 					<u> </u>
tropical fish ordered	 		<u> </u>		2.5	ļ	
Inventory and order fish Determine number of tanks to be prepared		ļ	 		2.5	-	<u> </u>
for new fish orders Identify disease and bacteria found	 	-	 		2.5	-	
in fresh water aquariums	 				2.5	 	-
	 		-	 		ļ	
Merchandising Fish Select and use appropriate gravel for types of fish to be displayed					2.9		1
Use proper lighting for display fish Select proper background and	-	-		-	2.3	ļ	•
ornaments for display fish	+	+	Ţ,		2.3	 	
Properly set up and display fish Display specialty fish properly	+			 	2.4		
Place fish in proper tanks					2.5		
Display top and bottom swimming fish appropriately					2.3	ļ.	ļ
Identify fish					2.5		



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Animal Health Assistant Stable Worker Kennel Worker	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Receiving and Handling Tropical Fish	-		
Acclimate newly received fish	2.5	 	
Unpack delicate fish	2.4		
Assist in Shipping and Receiving Animals			
Prepare transport cage			2.8
Capture animals			2.9
Load into truck			2.5
Transport to point of departure			2.4
			2.8
Prepare receiving cage Prepare quarantine area			2.8
			2.5
Transport animals for public display			
Maintaining Breeding Areas			2.8
Change bedding in winter quarters			2.7
Clean bedding areas of debris		+	7
Convert display area to bathing area	-	_	2.5
Incubate eggs (bird and reptile)		-	2.8
Clean incubator and breeder Separate new fish hatches from	_	-	2.8
aggressive parents	1 .		2.8



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TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Maintaining Breeding Areas (cont.)					-	-	·
Breeds birds	1.	ļ	-	 	,		2.7
	-		,				
Drive Zoo Vehicles Obtain valid license		·					2.8
Drive van	-				ļ		2.5
Drive dump truck Determine if fish transport and life		-	-				2.4
support vehicles need repair		-	-	1.	-	-	2.6
	-	 	-	 	 		
Obtaining Species Receiving donation						ļ	2.4
		-		·		ļ	-
Assisting in Keeper Training		-		-	-	1.	
Supervise new employees		-	-	-	+		3.0
Stress job safety	_		-	+			2.8
Demonstrate cage cleaning Demonstrate feeding and watering	_						2.9
Demonstrate giving medication		4 %				-	2.6
Demonstrate restraint and grooming		-	- 5			-	2.8
Identify high risk areas							2.9



							
TALK ATEMENTS	Assistant	Stuble Worker	Kennėl Worker	Dog Groomer	Pet Shop	Laboratory Animul Assistant	Zoo Keeper
Assist in Keeper Training (cont.)			ı				
	_ 		-				2.8
Demonstrate safety equipment Demonstrate receiving and shipping				<u> </u>			
of animals	, _•					ļ.	2.6
Demonstrate building and ground	•			1			2.5
maintenance		 		+ _			,
Review Union handbook			ļ	<u>'</u>	ļ	ļ	2.5
						.	
				!	1		
Performing Post Surgical Care		 	1	- 	 	+	
Identify shock symptoms		3	<u>. </u>			2.7	ļ
				-	<u> </u>	2.7	
Maintain body heat		 	+	+	+	1	1
Record abnormal behavior		<u> </u>	·		ļ	2.8	<u> </u>
	İ		ĺ				
			1	·	1		
Performing Euthanasia Methods	<u> </u>		-	+		-	
Identify method for specific species			\			2.7	4
						2.7	,
Perform euthanasia procedures	. 	 	+		+	+	
V-hiolog							
Maintaining Equipment Vehicles Oversee proper and safe use and main-		 	1	_	1	1	
tenance of equipment and vericles	-	2.9		· ·	 		
Add coolant to radiators		2.9			,		
Add oil to equipment		2.8	+-		+	-	٠.
Adjust clutch free pedal travel on tractors		2.4					
		2.3	· -		,		
Bleed diesel fuel system		12.3		1	<u>_</u>		ستت محمليد



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TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Maintaining Equipment and Vehicles (cont.)					· .	. /	
Change oil and oil filter		2.6		,			
Change thermostats		2.4		ļ 			
Clean debris from equipment	· - ·	2.6					
Grease equipment		2.7					
Inflate tires	· · ·	2.7					-
Inspect cooling system for leaks	· 	2.4	-		 		
. Install and adjust belts		2.4		1			
Install and service battery Interpret general maintenance directions		2.5	-	1	-		
in equipment operator's manual		2.6		<u> </u>	 	 	-
Remove equipment from storage		2.5	-	-		+	
Replace and adjust spark plugs		2.4		 	1.		e
Replace spark plug wires		2.4		-	+	1	
Prepare equipment for storage		2.6			+		
Oil equipment	-	1 2.0	<u> </u>				
Operating Equipment and Vehicles		1.					
Operate equipment and vehicles on public highways		2.9					
Interpret gauge readings on equipment		2.8					
Interpret safety symbols on equipment		2.9					ļ
. Adjust safety shields		2.8				<u> </u>	<u></u>
Programme Territoria Control C							



TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Operating Equipment and Vehicles (cont.)		9					
Identify potential hazards on equipment		2.9					·. ·
Refuel power units		3.0					
Connect hydraulic systems and equipment		2.7					
Connect 3-point hitch equipment		2.6					
Connect PTO shafts		2.6					
Hitch towed equipment		2.8	ļ	ļ			
Add wheel and front end weights	<u> </u>	2.6	· -		-	-	
Install equipment safety devices Correct potential equipment safety		2.7	<u> </u>		-		-
hazards Interpret safety and operating in-	 	2.7	-	 	 	 	
structions in operator's manual	ļ	2.9	-	·		1 /	<u> </u>
Operate equipment under work conditions Use proper equipment and vehicles for	 	2.9			 		%
specific jobs	-	/2.8		₩.	 	 	1
Oversee safe operation of equipment by horse farm hand	ļ	3.0	-	 	<u> </u>		1
			<u> </u>		_		- \
Purchasing Supplies for Horse Farm Operation	J			1		ļ. —	
Determine when supplies need to be ordered		3.0		-		 	ļ
Determine which supplies need to be ordered		3.0	· ·	1	<u> </u>		1
Determine quantity of supplies to be ordered	<u> </u>	3.0			<u> </u>	<u> </u>	



·							
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Purchasing Supplies for Horse Farm	•						
Operation (cont.)					L		
Determine amount of supplies to keep			1				
on hand		2.9_					
Assist in deciding when to order				ĺ		<u> </u>	1
supplies	*	2.6					
Зарргио				,			,
		1	1				
Constructing and Maintaining Horse							
Buildings and Structures		ļ.		1		Ì	1 . 1
Determine what type of construction is		 			1	1	
most acceptable for horse farms		2.7	1	ļ		<u> </u>	
most acceptable for noise farms		+	 	<u> </u>	1		
Determine type and number of buildings		2.7	1	1	1	}	1.
to be tonstructed		+	+		 	1	
Determine type and number of fences to	1	2.9	}		1		1
be constructed		12.5	 -	 	+	 	
Determine internal fixtures for the		2.8	1	1		1	
building constructed /	<u> </u>	2.0		}	+	 	[
A law and motal procenyatives		2.9	1	1.37			}
Apply wood and metal preservatives	 	+	 	 	+	1	
Clean and oil electric motors		2.8	1 .			†	
Clean and oil electric motors	 	+	 	' 	 		1
n ili and marro concrete forms	·	2.4					
Build and remove concrete forms	 	+		+	+	<u> </u>	
- I and doore		2.9					1
Repair and hang gates and doors	+	+2.3	 			 -	
		2.5	1	1			
Lay block and brick	 	12.5	+	+	+	+	;
•	ļ	2.5	1	ļ.	ľ	ļ	
Install electric motors	 	12.3	+		+	+	
) ·	100	ļ	1			
Mix, pour, finish, and cure concrete	 	2.9	 		+	+	+
		107	-		·		
Repair bracing in buildings	 _ _ 	2.7	_ 		+	+	+
			1				
Repair minor leaks in roof of buildings	 	2.8			+	+	+
		1	,				
Repair electrical cords		2.7			+		+
	ł	100				-	1.
Reset circuit breakers		2.9		ــــــــــــــــــــــــــــــــــــــ			ــــــــــــــــــــــــــــــــــــــ
				•	2		

							
TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Constructing and Maintaining Horse Buildings and Structures (cont.)				<i>'</i> 1			
Replace fuses		2.9		ļ - ļ			<u> </u>
Replace lighting fixtures and bulbs		2.7					
Repair faucets		2.6		}		 	Z
Replace water pipes		2.5	<u> </u>	ļ ·			
Replace window panes	-	2.3		ļ			
Construct and repair fences and gates	ļ	2.9		 			
Repair wood siding on buildings		2.7	<u> </u>			ļ	
		ļ	ļ	-	ļ.	<u> </u>	ļ
Assembling and Installing Horse Operation Equipment	ļ. 		<u> </u>		ì		ļ
Determine what equipment needs to be installed		2.9		<u> </u>		ļ	
Check for missing items of equipment	<u>.</u>	2.8	<u> </u>			· 	
Interpret assembly diagrams		2.7	<u> </u>				
Interpret assembly instructions	<u> </u>	2.8	<u> </u>	 		1.7.	-
Follow written assembly instructions	_	2.7		* .		ļ. ———	ļ
Use proper equipment and tools to assemble and install equipment and		2.8				<u> </u>	ļ
structures						ļ	ļ
Inspect assembled equipment for operational defects		. 2.4				<u> </u>	-
Install equipment and structures in proper places		2.6				1.	
Adjust belts on equipment		2.7			 	· ·	
Adjust chains on equipment		2.6				<u></u>	



				:			
						Animal	. [
			_		,	nin	
	Health nt…	er	Worker				1
	а. .:	rk	r.	Groomer		<u>ج</u> ج	i r
	He	Wo	₩	ПO	ďς	0.12	Keeper
TASK STATEMENTS	ta ta	o)	ਰ) <u>1</u>	Shop	rat	ě
	ma 1.s	[p]	ıne		1	boj Si:	
	Animal Hee Assistant	Stable Worker	Kennel	Dog	Pet	Laboratory Assistant	Zoo
	<u> </u>	03		-	ļ		
Assembling and Installing Horse Operation		ļ					-
Equipment (cont.)		 	 		 		
		2.6	ļ				
Adjust controls on equipment	·	2.0	 	 	 		
			 		<u> </u>		
Maintaining the Horse Herd Health			l		<u> </u>		
Select appropriate chemical to clean			T				
horse buildings and equipment		3.0	<u> </u>	L		L	
Identify symptoms of nutrient	-					ļ	
imbalance		2.9	<u> </u>	<u> </u>	<u> </u>		ļ
Evaluate influence diseases and para-			1	1	1		
sites have on horse production		2.9	<u> </u>	<u> </u>			
Select appropriate methods to control			1		}	1	
internal and external parasites	_	2.9				 -	ļ
Work with a veterinarian in developing		1		1			
a horse herd health program	<u> </u>	3.0	ļ	 		 -	 `
			1			, ,	
Determine when pastures are rotated		2.9		 	 	 	
Determine when veterinarian should be		1				}	
called		3.0		 		 	
Evaluate life cycle of parasites to							1
determine control procedures to		2.6	-	∔ -	+		
follow		1 .		<u> </u>			
					 		
Spray buildings with insecticide					1		
repellents	<u> </u>	2.8	+		+		+
Apply insecticide repellents to horses						ł	
to control external parasites	-	2.9	+	+	+	╅	+
Supply medication through feed and		2.9				1	
water	 	14.9		 	+	 	+
Isolate horses with transmittible		2.9				1	
diseases	 	4.9	+	+	+	+	+
Interpret information contained on labels	ł	3.0	,	}	.		
of medications and insecticides	 -	13.0	-	+	+	+	+
	1	2.8].				
Take pulse and temperature	L	الأناب					



		r					
	Health nt	Worker	Worker	Groomer	Ω	ory Animai int	Keeper
TASK STATEMENTS	Animal He Assistant	Stable Worker	Kennel	Dog Gro	Pet Shop	Laboratory Assistant	Zoo Kee
	4					 	
Feeding Horses							
reeding noises			[1			
Determine which feeds may be fed		2.9			 	 	
Determine when feed mixtures should be		2.7	ļ		1		
changed for horses	 	12.7	 	1	1	 	
Determine nutrient requirements of		2.9	_	l			1
horses Evaluate how ration imbalance may in-					1		
fluence consumption of feed	ļ	2.7	<u> </u>		 	ļ	:
Determine amount of feed additives to		2.9		1	}	j	
food horses	 	12.3	 	†	 	+	
Determine appropriate form in which feed should be fed horses if different	ł	2.8				_L	
ages	 						
ages		\downarrow	1	 	 -	+	
		2.8	1.	Ì	-	-	
Determine amount of feed to be fed	}	12.0	 	+	+	+	1
Interpret information on feed tags		2.6	,		<u> </u>		
Determine total amount of feed needed	1	1	1				
for horse herd	L	2.7	1				
Determine amount of weight mare or					1	-	`
filly should gain during gestation		2.6	+				+
Determine when horses may be started	ľ	2.7				1.	
on grain Determine when horses may be turned out		 					
to pasture	ļ	2.7					J
				ļ			İ
Determine cost of various feed mixes		3.0	-				
	1	2.6	· '.		j		
Classify feed			<u> </u>				
Fill feed troughs and banks		3.0					
Fill waterers		3.0	 		- 		+
Provide more light feeds and water		2.7		- [•		
immediately after foaling		-	-				1
Prepare feed mixtures		2.9					
Troparo 2000 mars				.		. .	1.
Wean foals		2.8					



TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
	44	1 02		 	-		
Feeding Horses (cont.)	1			ļ			
Fill mineral feeders or place salt and mineral blocks		2.7			<u> </u>	<u> </u>	
Dry up mare		2-8					
Feed orphan fuls		2.9					
	1						
Identify moldy or spoiled feeds	+	3.0	<u> </u>	 	†		
Feed foals und≥c 6 months of age	 	2.9	 	+	+		
Feed yearlings or 2-year olds		2.8	 -	 	<u> </u>	 	
Feed gestating mare		2.8	 	-	<u> </u>	ļ	
Feed lactating mare		2.8	ļ		<u> </u>	ļ ·	ļ
Feed stallion in heavy service		2.9			<u> </u>	<u> </u>	
Feed idle mature stallion		2.9			<u> </u>		
Feed aged horse		2.9					
Work with veterinarian and horse owner in developing feeding program		2.4		* 1			
Owner in developing reeding program							
	+	+	 		1		
Loading and Shipping Horses		-	-	+		+	-
Determine when horses are loaded Determine where horses should be		2.9	+	+	-		+
shipped		2.8	ļ		 		
Load horses on carriers		2.8				<u> </u>	
Sort horses according to size and weight for loading		2.3					
Determine the number of horses to load on carriers		2.5			# # T		•
		3.0					
Prepare carriers for hauling							



TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Loading and Shipping Horses (cont.)							
Prepare horses for transport		2.8	ļ			-	
Hitch tractor		2.9					
Determine what morses are to be shipped		2.9		ļ	1	· 	
Blanket horses for transport		2.3					
7			1		<u> </u>		
Selecting Horses						ļ	
Identify horses to be selected		2.9					
Select horses on individuality, pedi- gree, show ring winning, and/or		2.7					
performance							
Evaluate advantage of breeds		2.8	1				
Determine degree various traits are inherited		2.7					-
.Interpret pedigrees		2.7				ļ	ļ
Determine age of horses to select	<u>.</u>	2.6	-	ļ		ļ	ļ
Evaluate overall condition of horses to be selected		2.9		<u> '</u>			
Inspect animals for defects		2.9					ļ
Determine number and sex of horses to be selected		2.9					<u> </u>
Identify parts of horses		3.0					
Identity parts of horose							·
Decading Horses							
Breeding Horses Determine breeding system to be used		2.9					
Determine breeding system to be used	- -,			:		;	
	•				~		
	47	•		te e			



\					-	<u> </u>	
\						Animal	
	_	L	ы			ni	
	Animal Health Assistant	Worker	Worker	L ₁		A.	٠.
·	ea. t	or	or	Groomer		ry 1t	Keeper
THE CONTROL OF THE CO	H Gru	ን≊.	1	0	Shop	atc	
TASK STATEMENTS	al st	je je	[e]	ď	Sch	ore ist	ž
·	im Si	Stable	Kennel	Dog	Pet	Laboratory Assistant	200
	An As	St	×	Ă	й	n A	Ž
reeding Horses (cont.)							
reeding norses (cont.)						{ ·	
Determine when to breed horses		2.9			<u> </u>	<u> </u>	
Determine when mares should be rebred				1	1		
after foaling		2.8		ļ			
Determine if mare has settled	ļ	2.7	ļ	 	 	 -	
Determine number of mares a stallion		0.7] .	
may breed		2.7	 	 	+	 	
Determine when a stallion may be used]	2.6		1.	1		}
for the first time Examine mare and stallion to determine	 	1 2.0	 	+	 	<u> </u>	1
Examine mare and stallion to determine		2.4				}	
when they are ready for breeding Evaluate factors which influence	 	 	-	 	1	1	1
	1	2.5			}		
Conception rate Wash reproductive organs of mare and	 			1			T
stallion	Ì	2.9	} _	1	<u> L.:</u>		<u> </u>
Stallion		1					
Bandage tail of mare	l	2.9			J		
		7		1	1.		
Use twitch on mare		2.7	<u> </u>			 	1 10
e.					}		'
Use hobbles on mare /		2.6				+	
Determine due date for mares and	1	2.3	`. \	•	.		1 .
fillies	 	2.3				+	-
	'	2.4		·	ļ		j
Hand mate horses	+	+	+	+	1		†
	}	}			} ,		Ì
	+		+	—	1	7	
Culling Horses	1	1		- I			<u> </u>
Determine which horses are to be culled	1				7		ł
from the herd		2.9		ــــــــــــــــــــــــــــــــــــــ			
		·	F -	1	/		1
Identify reasons for culling horses		2.9				- 	
			1				
							+
							•
Fitting and Showing Horses					+	+	+-
Determine how horses should be fitted	1	2.9					
for show		1 2.3		سنسلب		_J	



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TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Fitting and Showing Horses (cont.)							
Determine appropriate class of eligibility of horses		2.8					
Identify horses to be exhibited		2.9					<u> </u>
Fit animals for show		2.7					
		/					·
Handling and Disposing of Animal Waste							
Determine how waste should be disposed of		2.9					
Determine where waste should be removed		2.9					
Prevent runoff from horse barns and manure storage pits		2.8					
Remove dead animals		3.0					
Remove manure from horse pens and quarters		3.0			-		
Spread manure on fields		2.8		· ·			,
					<u> </u>	 	
Handling and Caring for Horses					<u> </u>		
Determine when farmer should be called		2.9					ļ
Inspect horses for thoroughness of grooming		2.9			ļ		
Groom horses		2.9					ļ
Train horses to lead		2.9				·	
Train horses to lounge line		2.3					1.
Train horses to stand	1	2.5			<u> </u>	,	
Train horses to follow commands		2.5					
		1.					



		 -					
TASK STA MENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Fet Shop	Laboratory Animal Assistant	Zoo Keeper
Handling and Caring for Horses (cont.)			,				
Handling and Caring for horses (come.)				Ī			
Fit halters to horses		2.8	ļ		 		
	Ì	2.4	1	ľ	İ		
Determine when colts may be castrated Determine when a horse is first ready	 	2.4		 		 	
to ride	1	2.9			<u></u>	<u> </u>	
Evaluate influence of stress on growth		0.7					
Determine when mare could be moved to	 	2.7	 -	 	 	 	ļ
Determine when mare rooted be moved to feeding stall		2.8		>	1		
Determine stall and pasture space	1	† 					
needed for horses		2.6	<u> </u>	 		 	
Check for breed characteristics of	ļ· ,	2.9		1	Ì		J
horses Check for desirable characteristics and	 	1.2.3	 	 	+	 	
traits	1	2.9		1		ļ	ļ
					· I	1	
Train horses for halter	 	2.9	-		-		├ ──
Train horses for performance	İ	2.8					
Assist mare in delivering foal	+		T	1	1		
when needed		2.8	<u> </u>			 	
	1	2.5	1	ļ	į		_
Check mare's milk supply		12:3	1		+	1	
Assist veterinarian in castrating	_	2.7					<u> </u>
				1			
Clean foal at birth		2.6	 	_		+	
Clip. and disinfect foal, s navel cord		2.4					<u> </u>
Exercise horses		3.0					
		1 2 5	1			-	
Assist foal in nursing		2.5		+	-		
Recognize signs of foaling		2.9			_		
Isolate newly purchased horses for		2.9			.		
observation		1.2.9					-
Mark horses for identification		2, 5					
			•				



TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Handling and Caring for Horses (cont.)							ç
Observe horses each day for signs of problems		2.9					
Remove afterbirth		2.7		ļ 			
Trim fit		2.4					
Regulate temperature and environment in foaling quarters		2.4	,				
Clean mares before moving to foal quarters		2.4					
Place bedding in stalls and quarters		2,9					
Lime stalls and quarters		2.7					
Clean foaling stalls after delivery		, 2.7					
Give enema to foal		2.6					
Cool horses by walking/swimming		2.8					
Scrape prespiration from horses		2.3					
Wash and rinse horses		2.8	·				
Inspect for loose shoes and thrush		2.7					
Move horses to and from pasture		2.6		1.			
Remove non-compatible horses from herd		2.5					
Remove non-compatible noises from ner	1 :			 			
u ui l Coming for Took	-		1	1			-
Handling and Caring for Tack Determine what type of tack should be	+	2.9				1	
used Determine what tack should be replaced or repaired	-	2.9		1.			
Clean blankets		2.8					



TASK STATEMENTS	Animal Health Assistant	Stable Worker	Kennel Worker	Dog Groomer	Pet Shop	Laboratory Animal Assistant	Zoo Keeper
Handling and Caring for Tack (cont.)							
Clean tack		2.7	,				
Identify tack by proper name		2.7		ļ. ··	ļ		
Store tack properly		2.8		ļ	<u></u>		
Clean tack with saddle soap	ļ	2.8		<u> </u>	ļ. <u>"</u> —	ļ <u>'</u>	
Treat tack with Neats foot oil	<u>, </u>	2.7	<u> </u>	-		ļ	
Replace or repair damaged tack	ļ <i>;</i>	2.6	-		<u> </u>	1	
s Inspect tack for damage	ļ	2.6	 		, S	<u> </u>	
				ļ	<u> </u>	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1
				ļ		 	
		 		1	ļ	-	
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CONCLUSIONS

Conclusions were formulated on the data obtained from seven

occupational surveys in the amimal production and management taxonomy.

Conclusions follow:

- The occupational survey approach to curriculum development provides a realistic base for developing an instructional program. The procedure used in conducting occupational surveys collects data concerning "what is."
- Commonality and importance ratings of tasks may not always be directly related. Many important tasks required for specific occupations must be learned to succeed in those occupations but did not appear as tasks selected for the common core for the taxonomy.

RECOMMENDATIONS FOR FURTHER RESEARCH

- Essential tasks in animal production and management should be used in developing occupational profiles for use in vocational counseling and guidance.
- Task inventories should be used in cooperative vocational education programs in animal production and management in developing individual training plans for students.
- Task inventories provide check lists which should be used in evaluating student learning in animal production and management programs.
- 4. The potential tasks in any occupational preparation program should be validated by a local advisory committee and adapted to the needs of the community.
- 5. The number of tasks which must be learned by students should be used to justify an animal production and management program with sufficient time allocated to develop competent graduates.
- Instructors in vocational education in animal production and management at all levels should be task or skill oriented.



- 7. Findings of this study should provide a sound basis for development of competency-based instructional packages. The tasks should be developed as behavioral objectives with more specific skills taught as steps to meet the objectives.
- 8. The task inventory should be used as a resource in developing the technical animal production and management competencies needed for competency-based teacher education programs.
- 9. The task inventories should be used for self-evaluation by teachers to determine their inservice education needs.
- 10. Workshops on the use of task lists for curriculum improvement should be held which involves teacher educators, state supervisors, curriculum developers, and teachers.
- 11. Further research is needed to complete occupational surveys in occupations not examined in this study.
- 12. Evaluation of current national, state, and local curriculum guides should be conducted to ascertain whether tasks rated as essential in this study are being taught in vocational education programs in animal production and management.
- 13. Further research is needed to identify the leadership and personal development competencies needed in animal production and management occupations since these competencies were not identified in this study.

APPENDIX



Appendix 1

Special appreciation is expressed to the teachers in animal production and management who contributed to this study by developing and administering questionnaires in the seven animal production and management occupations surveyed. These individuals are:

Animal Health Assistant

Fred C. Cooke - former Graduate Research Associate in the Department of Agricultural Education

Stable Worker

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Pet Shop

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Laboratory Animal Assistant,

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Zoo Keeper

Timothy Loeb

- Toledo City Zoo

Dog Groomer

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Kennel Worker

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SUMMARY OF RESEARCH SERIES

Animal production and management, sometimes known as small animal care, has been rapidly developing as an instructional program in agricultural education. This development highlighted the need for vocational education curriculum in this area. Teachers of animal production and management assisted university personnel in conducting occupational surveys. Results of these surveys are reported herein. The results were also used to develop the Ohio Animal Production and Management Curriculum Guide.

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Research has been an important function of the Department of Agricultural Education since it was established in 1917. Research conducted by the Department has generally been in the form of graduate theses, staff studies, and funded research. It is the purpose of this series to make useful knowledge from such research available to practitioners in the profession.

J. Robert Warmbrod, Chairman Department Research Committee

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